

Name: _____ Class: _____ Due Date: _____

When solving the following problem, be sure to:

- 1) Restate the question.**
- 2) List facts and important information.**
- 3) Show work and/or explain solution strategy.**
- 4) State your answer in a complete sentence (reference the question).**

POW Splash!

Mathland High School held a festival to raise money for a local charity. One of the most popular events was a dunking tank where students had a chance to dunk teachers.



When Mr. Rashanul went in the booth, four of his algebra students each tried to dunk him. Each one took a different number of throws before eventually hitting the target and sending Mr. Rashanul plunging into the water.

Jorge took one less than twice as many throws as Shauna did. Shauna took twice as many as Kenya did, and Toni took two less than Jorge. The average number of throws for the four students was $4\frac{1}{2}$.

Use two different algebraic methods to figure out how many throws each student took. For instance, you might solve it the first time with your variable representing the number of throws for one of the students. The second time you could use a different student's throws as the variable or you could use four variables, one for each student's throws. Do you get the same answer?

Be sure to show and explain your thinking and work.

Extra: Which of your methods do you think was easier? Why do you think so?

Please answer the problem on a separate piece of paper. You must include all your calculations and an explanation of how you got your answer. Your paper will be scored in the following way:

- 4 The answer and the bonus are correct, you have included all your calculations, and the explanation is thorough and understandable.
- 3 The answer is correct, you have included all your calculations, and the explanation is complete and clear to the reader.
- 2 The answer is missing one of the items mentioned above.
- 1 The answer is incorrect, and the explanation or calculations are poor or missing.
- 0 Minimal or no effort was made to solve the problem.
- All late work is marked down a grade.